

51



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,490	03/04/2002	Wayne Eric Burk	5181-83900	5066
7590	05/05/2004		EXAMINER MONESTIME, MACKLY	
Jeffrey C. Hood Conley, Rose & Tayon, P.C. P.O. Box 398 Austin, TX 78767			ART UNIT 2676	PAPER NUMBER 7
DATE MAILED: 05/05/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,490

Applicant(s)

BURK ET AL.

Examiner

Mackly Monestime

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,10-12,21,27 and 28 is/are rejected.
- 7) ☒ Claim(s) 2-9, 13-20 and 22-26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Response to Amendment

1. The amendment received on April 5, 2004 has entered and carefully considered. Claims 1-28 are still pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 10-12, 21 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seiler et al. (US Patent No. 4,929,889) in view of Kundu et al (US Patent No. 6,510,398).
3. Seiler et al were cited in the last office action.
4. As per claims 1, 10 and 21, Seiler et al substantially disclosed the invention as claimed, including a computer system comprising: a host computer system (Fig. 1, Item No. 4); a first component configured to output data, wherein the data includes requested data and unrequested data; a second component configured to request data from the first component, wherein the second component includes a signature analysis register configured to capture data (Fig. 4; col. 2, lines 55-59; col. 6, lines 24-28), wherein the signature analysis register is configured to be controlled by the host computer system (col. 3, lines 48-51); a bus coupling the first component and the second component and configured to transmit data between the first component and the second component (Fig. 4, Item No. 200).

Seiler et al did not explicitly disclose a controller coupled to receive the data and the unrequested data output by the first component, wherein the controller configured to receive the data output by the first component in response to the second component's request, wherein the controller is configured to replace the unrequested data with predictable data and to output the predictable data and the requested data, wherein the signature analysis register is configured to capture the predictable data and the requested data; but Seiler et al did disclose the use of a VCPU 16 / CFPA 22 to form the main controller of the graphics subsystem (Fig. 1, Item No. 6); and further disclosed a load control unit to control that properly directs the loading of data into various registers (Fig. 4, Item No. 207), a control register providing means for specifying the set of test points to be tested (col. 10, lines 33-35). However, Kundu et al disclosed a constraint checker and corrector module is coupled to the pattern generator, wherein the constraint checker and corrector module receives the random data patterns, inspects the received random data patterns for any undesirable random data patterns, and replaces any undesirable random data patterns found in the generated random data patterns with desirable bit sequences (col. 4, lines 51-60; col. 5, lines 16-29; col. 7, lines 1-9 and 17-20). Therefore, taking the combined teachings of Kundu et al and Seiler et al as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the constraint checker and corrector module taught by Kundu et al into the system of Seiler et al because doing so would provide a test system that eliminates bus contention problems caused by unpredictable data during, thereby enhance the functionality of the integrated circuit device.

5. As per claim 11, Seiler et al disclosed that the first component includes a frame buffer (Fig. 2, Item No. 24), and the second component includes a hardware accelerator (Fig. 2, Item No. 40).

6. As per claim 12, Seiler et al disclosed the first component includes a media processor (Fig. 2, Item No. 16) and the second component includes a hardware accelerator (Fig. 2, Item No. 40).

7. As per claim 27, Seiler et al disclosed that each bit included in the predictable data has a logical value of zero (col. 7, lines 37-43).

8. As per claim 28, Seiler et al disclosed that buffering the data provided by the providing device in a data queue before the data output on a bus (Fig. 2, Items No. 24, 29).

Seiler et al did not explicitly disclose: wherein replacing comprises replacing the unrequested data output from the data queue and outputting the predictable data and the requested data on the data bus. However, Kundu et al disclosed a constraint checker and corrector module is coupled to the pattern generator, wherein the constraint checker and corrector module receives the random data patterns, inspects the received random data patterns for any undesirable random data patterns, and replaces any undesirable random data patterns found in the generated random data patterns with desirable bit sequences (col. 4, lines 51-60; col. 5, lines 16-29; col. 7, lines 1-9 and 17-20). Therefore, taking the combined teachings of Kundu et al and Seiler et al as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the constraint checker and corrector module taught by Kundu et al into the system of Seiler et al because doing so would provide a test system that

eliminates bus contention problems caused by unpredictable data during, thereby enhance the functionality of the integrated circuit device.

Allowable Subject Matter

9. Claims 2-9, 13-20 and 22-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The prior art of record further failed to teach or render obvious the combination of elements recited in the claim. The cited references did not specifically disclose or suggest the following limitations: “wherein the controller is configured to store an indication identifying the requested data in response to the second component requested data from the first component, wherein the controller is configured to select which of the data output by the first component is unrequested data dependent on the indication” (as per claims 2 and 13). The above limitations of the present claims invention have not found to be anticipated, suggested or made obvious by the prior art of record, either singularly or in combination.

11. The prior art of record further failed to teach or render obvious the combination of elements recited in the claim. The cited references did not specifically disclose or suggest the following limitations: “storing an indication identifying the requested data in response to said requesting device requesting data, wherein said replacing comprises selected the unrequesting data for replacement dependent on the first indication” (as per claim 22). The above limitations of the present claims invention have not found to be anticipated, suggested or made obvious by the prior art of record, either singularly or in combination.

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks

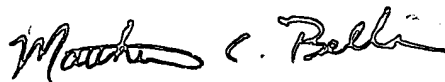
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600



Mackly Monestime

Patent Examiner

April 29, 2004